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## **CLAIMS**

- 1. Device for the transdermal administration of an active compound, comprising a current generator and at least one pair of electrodes for application to a patient, one of which must be suitable for holding a vehicle containing the active compound, characterized in that said generator generates a one-way current between said electrodes which is modulated in amplitude by a modulator of a periodic nature.
- 2. Device according to Claim 1, characterized in that said modulator has an amplitude which can vary between zero and a maximum value.
- 3. Device according to Claim 1 or 2, characterized in that the oneway current has a positive sinusoidal-waveform.
- 4. Device according to Claim 1 or 2, characterized in that the oneway current has a rectified sinusoidal-waveform.
- 5. Device according to Claim 1 or 2, characterized in that the oneway current has a half-sinusoidal waveform.
- 6. Device according to Claim 1 or 2, characterized in that the one-way current has a triangular or sawtooth waveform.
- 7. Device according to Claim 1 or 2, characterized in that the one-20 way current has a square waveform.
  - 8. Device according to one or more of the foregoing Claims, characterized in that the modulator has a waveform selected from the group comprising: a triangular waveform, a rectified sinusoidal waveform, a half-sinusoidal waveform or combinations thereof.
  - 9. Device according to one or more of the foregoing Claims, characterized in that the one-way current has a frequency of between 100 and 3000 Hz.
  - 10. Device according to one or more of the foregoing Claims, characterized in that the modulator has a frequency between 0.1 and 5 Hz and preferably between 0.5 and 1 Hz.
  - 11. Device according to one or more of the foregoing Claims, characterized in that the current applied between the electrodes has a

maximum value of 100 mA.

- 12. Method of administering an active compound by transdermal means, comprising the stages of:
- applying two electrodes, one of which is associated with a vehicle containing the active compound,
- generating a one-way current between the two said electrodes which is modulated in amplitude by a modulating signal of a periodic nature.
- 13. Method according to Claim 12, characterized in that said one-way current has a waveform selected from the group comprising: a rectified sinusoidal wave, a half-sinusoidal wave, a sawtooth wave, a triangular wave, a square wave, a positive sinusoidal wave, a train of pulses.
- 14. Method according to Claims 12 or 13, characterized in that said modulator has a waveform selected from the group comprising: a triangular waveform, a sawtooth waveform, a rectified sinusoidal waveform, a half-sinusoidal waveform or combinations thereof.
- 15. Method according to Claims 12, 13 or 14, characterized in that said modulating signal has an amplitude which can be varied between zero and a maximum value.
- 16. Method according to one or more of Claims 12 to 15, characterized in that said one-way current has a frequency of between 100 and 3000 Hz.
- 17. Method according to one or more of Claims 12 to 16, characterized in that said modulating signal has a frequency of between 0.1 and 5 Hz and preferably between 0.5 and 1 Hz.
- 18. Method according to one or more of the foregoing Claims, characterized in that the current between said electrodes varies between zero and a maximum value equal to 100 mA.



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